

### **REMARKS**

This Amendment and Response is being submitted in response to the Office Action dated January 14, 2004, for which a response is due May 14, 2004 with a one month extension of time. In the Office Action, the examiner objected to Figures 1-3 and 8 and to the Abstract. In addition, claims 1-13 were rejected under 35 U.S.C. §112, first paragraph or second paragraph. Claims 1-6 were also rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,715,276 issued to Tran et al. ("Tran") and 35 U.S. Patent No. 5,903,595 issued to Suzuki ("Suzuki"). Claims 7-13 were rejected as being unpatentable over Tran in view of the admitted prior art. Claims 1-2, 4-5, 7-8 and 10-13 are being amended, with claims 1-13 pending. Reexamination and reconsideration in light of the amendments and remarks made herein are respectfully requested.

#### **I. Drawings**

Replacement sheets for Figures 1-3 and 8 are being submitted herewith to correct the deficiencies noted in the Office Action.

#### **II. Specification**

The Abstract has been amended to correct the deficiencies noted in the Office Action. In addition, the Specification has been amended to be in accord with the drawings changes being submitted herewith.

### **III. 35 U.S.C. 112, first and second paragraphs**

The claims have been amended to overcome the Section 112 rejections made in the Office Action. In particular, the claims have been amended to clarify that the first storage means stores "N input signals."

The examiner also requested that the applicant point out which part of the disclosure supports the claimed "comparator is an XOR circuit," as recited in claims 6 and 9. Applicant submits that one skilled in the art would read the specification and the claims (which form part of the disclosure and may be relied on as such) and recognize that an XOR circuit is capable of carrying out the operations of the recited "comparator."

Finally, claims 10-11 were rejected under Section 12 for use of the term "counter." In response claims 10-11 have been amended to recite an "arithmetic unit for squaring both components of the complex correlation sample and summing up said squared components." Support can be found, in part, on page 8, lines 9-27.

### **IV. Tran**

Applicant submits that Tran fails to teach or disclose the arrangement of claims 1-6. Tran discloses a bit matched filter which purports to require less silicon and consume less power. However, as with conventional matched filters, the matched filter of Tran is matched to one reference signal at a time. In contrast, one aspect of the applicant's disclosure "allows several spreading codes

to be searched for in parallel by time-multiplexing the reference signals used.” (See Application, p. 11, lines 14-15). In one embodiment, this is achieved using the selection signal 6-25, which can be a memory address. This eliminates the need to use more than one filter to simultaneously search for more than one signal to be received. Thus, Tran fails to teach or disclose the “second means for storing  $K$   $M$ -sample long reference signals, where  $K \geq 2$ ”, as recited in amended Claims 1 and 7.

Applicant further submits that Tran, taken alone or in combination with the admitted prior art, fails to teach or disclose the arrangement of claims 7-13. In particular, neither Tran nor the admitted prior art teach or suggest matching more than one reference signal at a time, as recited in the present claims.

## **V. Suzuki**

Applicant submits that Suzuki fails to teach or disclose the arrangement of claims 1-6. Suzuki discloses a digital matched filter which purports to have low power consumption. As with conventional matched filters and the matched filter of Tran discussed above, Suzuki matches to one reference signal at a time. In contrast, one aspect of the applicant's disclosure “allows several spreading codes to be searched for in parallel by time-multiplexing the reference signals used.” (See Application, p. 11, lines 14-15). In one embodiment, this is achieved using the selection signal 6-25, which can be a memory address. This eliminates the need to use more than one filter to simultaneously search for more than one

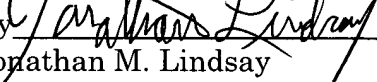
signal to be received. Thus, Tran fails to teach or disclose the "second means for storing K M-sample long reference signals, where  $K \geq 2$ ", as recited in amended Claims 1 and 7.

Applicant respectfully submits that the application is now in condition for allowance. Applicant further submits that the dependent claims are allowable by virtue of depending on allowable base claims. If there are any questions regarding this Response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Respectfully submitted,

CROWELL & MORING LLP

Dated: May 14, 2004

By   
Jonathan M. Lindsay  
Reg. No. 45,810  
Tel.: (949) 263-8400 (Pacific Coast)

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05/14/2004

  
Angela Williams

Date